IN THE CLAIMS:

1. (Original) A method of transmitting signals to a satellite having at least two antennas (3, 5 whose radiation patterns overlap, at least in part and means (45; 47, 49, 51) for receiving signals from the various antennas, the method including the following steps:

- transmitting spread spectrum modulated signals,
- receiving the signals via the antennas (3, 5),
- summing the signals received via the antennas and 10 delaying at least one of the received signals so that the path difference between the summed signals is at least one chip of the spread spectrum modulation, and
- demodulating the summed signals.

2. (Original) A method of transmitting signals from a satellite having at least two antennas (3, 5: whose radiation patterns overlap, at least in part and means (55, 56) for sending signals to the various antennas, the method including the following steps:

- spread spectrum modulating the signals to be 20 transmitted,
- sending the modulated signals to the antennas, and
- transmitting the signals via the antennas, the signals transmitted via the antennas being offset by at least one chip of the spread spectrum modulation.

3. (Original) The method according to claim 2, characterized in that the modulation step includes modulating the signals intended for said antennas using spreading sequences offset by at least one chip.

4. (Original) The method according to claim 2 or claim 3, characterized in that the sending step includes applying a time-delay to the signals intended for at least one of the antennas.

5. (Original) A method of transmitting signals from a satellite having at least two antennas (3, 5 whose radiation patterns overlap, at least in part and means (55, 56) for sending signals to the various antennas, the method including the following steps:

- spread spectrum modulating the signals to be transmitted,
- sending the modulated signals to the antennas, and
- transmitting the signals via the antennas, the signals intended for the various antennas being spread spectrum 10 modulated using different sequences.

6. (Original) A satellite having at least two antennas (3, 5) whose radiation patterns overlap, at least in part and means (45; 47, 49, 51) for receiving the sum of the signals from the various antennas, the satellite being characterized in that the receiver means include means for demodulating a spread spectrum signal and in that the absolute difference between the respective transmission times of signals transmitted to the receiver means via two antennas is greater than one chip of the spread spectrum modulation.

7. (Original) The satellite according to claim 6, characterized in that the receiver means include a coupler (47) for signals from the antennas and at least two receivers (49, 51) connected to the coupler.

8. (Original) The satellite according to claim 6 or claim 7, characterized in that it includes time-delay units (53) between at least one antenna and the receiver means.

9. (Original) The satellite according to claim 8, characterized in that the time-delay units include a coaxial connection, a 30 delay line or a surface acoustic wave filter.

10. (Original) A satellite having at least two antennas (3, 5) whose radiation patterns overlap, at least in part and means (55, 56, 57) for sending signals to the antennas, characterized in that the sending means include means for spread spectrum modulating the signal to be transmitted and in that the absolute difference between the respective transmission times of signals transmitted by the transmitter means via two antennas is greater than one chip of the spread spectrum modulation.

11. (Original) A satellite having at least two antennas (3, 5) whose radiation patterns overlap, at least in part and means (55, 56, 57) for sending signals to the various antennas, the satellite being characterized in that the sending means include means for spread spectrum modulating the signals intended for the various antennas using different sequences.

12. (Original) The satellite according to claim 10 or claim 11, characterized in that the transmitter means include at least two transmitters (55, 56) in a cold redundancy configuration and a coupler (57) for sending the signals from the transmitters to the antennas.

13. (Currently Amended) The satellite according to claim 10 or claim 11 ~~or claim 12~~, characterized in that it includes time-delay units between the transmitter means and at least one antenna.

14. (Original) The satellite according to claim 13, characterized in that the time-delay units include a coaxial connection, a delay line or a surface acoustic wave filter.

15. (New) The method according to claim 1 or claim 2 which excludes phase shifting of the signals.

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16. (New) The satellite according to claim 10 or claim 11 which is free of means for phase shifting the signals.